



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,683	07/12/2001	Hamid Ould-Brahim	71493-1004 /jlo	1611

293 7590 09/01/2006

Ralph A. Dowell of DOWELL & DOWELL P.C.
2111 Eisenhower Ave
Suite 406
Alexandria, VA 22314

EXAMINER

ABRISHAMKAR, KAVEH

ART UNIT PAPER NUMBER

2131

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
09/902,683	OULD-BRAHIM ET AL.	
Examiner	Art Unit	
Kaveh Abrishamkar	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed on June 21, 2006. Claims 1-21 are currently pending consideration.

Response to Arguments

2. Applicant's arguments filed June 21, 2006 have been fully considered but they are not persuasive for the following reasons:

Regarding claims 10-18, the Applicant argues that the 35 U.S.C. 101 rejection on claim 10 and subsequent dependent claims is not valid as the fields have an assigned functionality, and are not non-functional descriptive material. This argument is not found persuasive. Claim 10 consists of a preamble, which describes an environment consisting of a network-based VPN, but the claim is directed towards an Update message comprising a data format. This claim was amended to state "an Update message embodied in a transmission medium and comprising a data format." This is not deemed sufficient to make the claim statutory as the Examiner could not find any support for the transmission medium in the specification, and can only assume that the transmission medium is a signal. Therefore, it is asserted that the claim is just directed towards a signal which has the capability to be in the described environment, which is still not statutory. In addition to this, the claims are still deemed to be non-functional

Art Unit: 2131

descriptive material as the fields as claimed, do not perform any specific data manipulation, and is just delineating the format of a message.

Furthermore, regarding claim 1, the Applicant argues that the limitations found in the claims are not non-functional descriptive material, and should be treated as functional descriptive material. The Applicant states that the fields "impart functionality when employed as a computer component." These arguments are not found persuasive. Claim 1 delineates a BGP speaker sending an update message which is taught by the Cited Prior Art (CPA), Rekhter et al. (U.S. Patent 6,526,056), and then states the update message which is sent contains different data fields. These data fields are defined by nomenclature only, and the claims do not specify what functionality is being imparted, and the claims do not state that the update message is received by a device which interprets the fields and performs a specific function. Therefore, it is still viewed that these differences are found in the non-functional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, the rejection for the pending claims is maintained as given below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rekhter et al. (U.S. Patent No. 6,526,056).

Regarding claim 1, Rekhter discloses:

A Border Gateway Protocol Speaker (BGP Speaker) (column 9, lines 54-60, column 12, lines 35-55, column 13, lines 5-18, column 14, lines 36-42), in a communication system which implements at least one network based Virtual Private Network (NB-VPN) across a backbone (column 3, lines 7-14, column 9, lines 44-60, column 18, lines 43-49), the at least one NB-VPN using an Open System Interconnect (OSI) layer-2 protocol and an OSI layer-3 protocol (column 2, lines 16-28), at least one NB-VPN using an OSI layer-2 protocol different from an OSI layer-2 protocol used by the backbone or using an OSI layer-3 protocol different from an OSI layer-3 protocol used by the backbone (column 7, lines 38-65, column 9, lines 44-60, column 11, lines 23-33, column 15, lines 45-65, column 19, lines 31-59, column 21, lines 45-54) the BGP speaker transmitting an Update message (column 13, 5-19, column 17, lines 35-43) being in conformance with a Border Gateway Protocol (BGP), and the Update message further including:

Virtual Private Network (VPN) Membership information (column 19, lines 45-50);
and
VPN Reachability information (column 20, lines 1-9).

Rekhter does not explicitly disclose that the update message further comprises:, a VPN reachability mode field, and Tunnel Mechanism information. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

Claim 2 is rejected as applied above in rejecting claim 1. Furthermore, Rekhter does not explicitly disclose that the VPN membership information includes at least one VPN Identification (VPN-ID) field and a number of VPN-IDs field. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved

in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

Claim 3 is rejected as applied above in rejecting claim 1. Furthermore, Rekhter does not explicitly disclose that the VPN Reachability information includes zero or more VPN Reachability entries. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of

data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Claim 4 is rejected as applied above in rejecting claim 3. Rekhter does not explicitly disclose that the VPN Reachability entry includes a VPN reachability type field, a length field, and a VPN reachability value field. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Claim 5 is rejected as applied above in rejecting claim 1. Rekhter does not explicitly disclose that the Tunnel Mechanism information includes zero or more VPN Tunnel entries. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields

delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Claim 6 is rejected as applied above in rejecting claim 5. Rekhter does not explicitly disclose that the VPN Tunnel Entry includes a Tunnel Type field, a Length field and a Tunnel Value field. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Claim 7 is rejected as applied above in rejecting claim 1. Rekhter does not explicitly disclose that the Update message includes a unique Subsequent Address Family Identifier (SAFI) value indicating that the updating message includes a VPN membership information, VPN reachability information, and Tunnel Mechanism information. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Claim 8 is rejected as applied above in rejecting claim 7. Rekhter does not explicitly disclose that the unique SAFI value is 129. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not

Art Unit: 2131

distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Claim 9 is rejected as applied above in rejecting claim 1. Rekhter does not explicitly disclose that the Update message includes a field indicating the topology of a NB-VPN. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Regarding claim 19, Rekhter discloses:

A Virtual Router (VR) (column 3 , lines 44-64), in a communication system which implements at least one network based Virtual Private Network (NB-VPN) across a backbone (column 3, lines 7-14, column 9, lines 44-60, column 18, lines 43-49), the at least one NB-VPN using an Open System Interconnect (OSI) layer-2 protocol and an OSI layer-3 protocol (column 2, lines 16-28), at least one NB-VPN using an OSI layer-2 protocol different from an OSI layer-2 protocol used by the backbone or using an OSI layer-3 protocol different from an OSI layer-3 protocol used by the backbone (column 7, lines 38-65, column 9, lines 44-60, column 11, lines 23-33, column 15, lines 45-65, column 19, lines 31-59, column 21, lines 45-54) the BGP speaker transmitting an Update message (column 13, 5-19, column 17, lines 35-43) being in conformance with a Border Gateway Protocol (BGP), the Update message further including information relating to a NB-VPN to which the VR belongs (column 19, lines 45-50), and the VR including instructions for establishing an OSI-layer 2 connection to at least one other VR in the communication system (column 3, lines 53-63).

Rekhter does not explicitly disclose that the update message further includes information relating to networking systems used by the NB-VPN to which the VR belongs. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381,

Art Unit: 2131

1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Claim 20 is rejected as applied above in rejecting claim 19. Rekhter does not explicitly disclose that the Update message includes a unique Subsequent Address Family Identifier (SAFI) value indicating that the updating message includes a VPN membership information, VPN reachability information, and Tunnel Mechanism information. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

Claim 21 is rejected as applied above in rejecting claim 7. Rekhter does not explicitly disclose that the unique SAFI value is 129. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transmitting the update message would have been performed regardless of the different data fields delineated above. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transmit an update message containing any type of data fields, because defining such data fields does not functionally relate to the steps in the method claimed and because the subjective interpretation

5. Claims 10-18 are claims directed to a "data format" analogous to the BGP Speaker claims rejected above, and therefore, are rejected using the same reasoning.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Abrishamkar whose telephone number is 571-272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2131

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KA
08/30/2006

CHRISTOPHER REVAK
PRIMARY EXAMINER

CR 8/31/06